## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## Listing of Claims:

- 1-3. (Canceled)
- 4. (Currently Amended) A method for controlling a transmission control protocol window size in an asynchronous transfer mode network, comprising:

a step for an ATM transmitting terminal to receive receiving a resource management cell in an ATM transmitting terminal;

a step for transmitting an explicit rate value in the received resource management cell to a transmission control protocol level in the ATM transmitting terminal;

a step for setting a congestion window size to an initial value, when the explicit rate value is received;

a-step for computing the congestion window size, when an acknowledgment signal is received from an ATM receiving terminal; and

a step for computing a window size, when the congestion window size is computed, computed, wherein the window size is set to a lesser of the congestion window size and a maximum window size capable of being received by the ATM receiving terminal; and

for transmitting a data to the ATM receiving terminal according to the computed window size.

- 5-7. (Canceled)
- 8. (Currently Amended) The method of according to claim 4, wherein setting a congestion window size to an initial value comprises setting the congestion window size to the initial value is 'l'.
- 9. (Previously Presented) A method for controlling a transmission control protocol window size in a asynchronous transfer mode network by using an explicit rate value in a resource

management cell of a network during data transmission from a transmitting side ATM terminal to a receiving side ATM terminal, the receiving side ATM terminal being configured to receive a maximum window size of data, the method comprising:

determining the maximum window size capable of being received by the receiving side ATM terminal;

determining a congestion window, the congestion window being calculated based on a transmission control protocol throughput, an estimated round trip time of a packet, and a numeric value compensating for variations in network states, the transmission control protocol throughput being determined based on the explicit rate value in the resource management cell and a maximum segment size of a transmission control protocol level; and

setting the window size to the lesser of the congestion window size and the maximum window size capable of being received by the receiving side ATM terminal.

- 10. (New) The method according to claim 4, wherein the congestion window size is calculated based on a transmission control throughput, an estimated round trip time of a packet, and a numeric value compensating for variations in network states.
- 11. (New) The method of claim 10, wherein the transmission control protocol throughput is determined based on the explicit rate value in the resource management cell and a maximum segment size of the transmission control protocol level.